

**400 MHz TETRA
DIGITAL LARGE REPEATER**

- **4 W RF OUTPUT POWER**
- **DIGITAL FILTER TECHNOLOGY (SDR)**
- **FLEXIBLE FILTER SELECTION**
- **FREQUENCY SHIFT FUNCTION**
- **HIGH DYNAMIC RANGE**
- **LOW POWER CONSUMPTION**
- **RS-232 and ETHERNET CONTROL INTERFACE**
- **COMPACT SIZE**

This repeater is intended for use in 400 MHz out- and indoor TETRA systems. Based on the latest digital filter technology this model offers freedom for the users to select the best possible filter characteristics for the actual application type. It has perfect EVM parameters of <1% and low power consumption figures.

Supplied in a compact box, the BRTL35 is an ideal choice to be used in areas where the flexible filter selection is essential for smooth operation and/or network design. The unit can be monitored and set locally and remotely.

Electrical characteristics:

Frequency Band Downlink	390 – 395 MHz*
Frequency Band Uplink	380 – 385 MHz*
Operator Frequency Bandwidth	5 MHz
Mode of Operation	channel or band selective duplex (upto 8 ch)
Max. ALC level	36 dBm @ downlink / 33 dBm @ uplink
Linear Output Power (Uplink and Downlink)	+36 dBm downlink / +24 dBm uplink typ.
ICP3	+68 dBm @ downlink / +50 dBm @ uplink
ACPR	60 dB @ 36 dBm downlink and 24 dBm uplink
Nominal Gain	90 dB
Gain Setting	90 to 60 dB in 1 dB steps
Gain Stability	< ± 1.5 dB (within oper. temp. range)
Uplink Input Noise Figure	4,5 dB typ. @ max gain
EVM	< 1% typ. (ETSI regulation < 10%)
Harmonics	According to the ETSI regulation
Spurious Radiation	According to the ETSI regulation
Local Leakage	According to the ETSI regulation
RF Connectors	N – female
Supply Voltage	100 - 240V / 50 – 60Hz AC (optional 48V DC)
Power Consumption	120 W
Weight	25 kg
Operating temperature range	0°C to + 40°C (optional -20°C to 55°C)**
Cooling	Convection or optional fan
Wired Control	Local RS232 and Ethernet connection
Application	In- or outdoor IP65 (optional IP67)
Dimension	420 x 400 x 175 mm

Specifications are subject to change without notice.

*available in any other standard TETRA bands too.

**with thicker heat sink



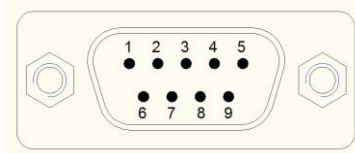
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Alarm signalling

Summary alarm output	dry contact on 9 pin D-sub connector
External alarm inputs	4 independent external alarm inputs on separated connector

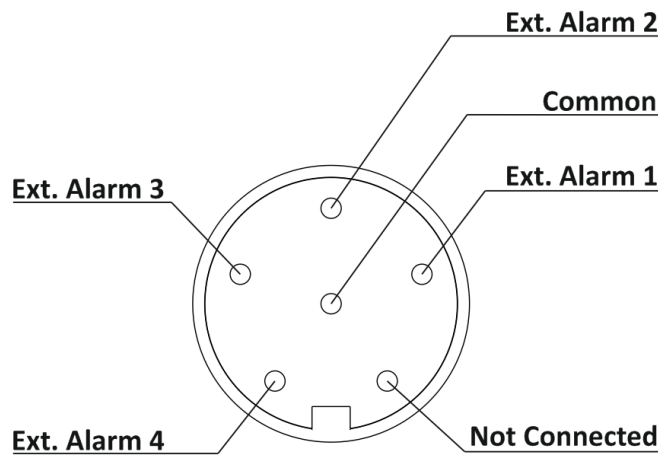
9 pin D-Sub connector pin out

Status	DSUB-M PIN 4 and 7
Overheating	Open
PLL lock error	Open
RF overdrive***	Open
DL power alarm	Open
Chassis intrusion	Open
Switched off	Open



ANY OTHER CASE: CLOSED CONTACT BETWEEN PIN 4 AND 7
***after 30 minutes of continuous RF overdrive status

6 pin external alarm input connector pin out





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Outline dimensions (mm):

